State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: John Thomas
Associate Environmental Planner
San Joaquin Valley Analysis Branch

June 14, 2012

File: MNO 395
EA: 09-33500
ID: 0900020002
PM 52.3/53.7

From: Ken Romero
Branch Chief
Central Region Environmental Engineering Branch

Subject: Air, Noise and Water Quality Report for the U.S. 395 Lee Vining Rockfall Project, Mono County.

An air, noise and water quality study for the subject project was conducted by review of Photolog, maps, and data bases, to assess potential environmental impacts.

Project Description

The project is located on U.S. 395 between post miles 52.3 and 53.7 in Mono County (Figures 1 and 2). The project proposes to reduce rockfall from existing cut slopes on the west side of the US Highway 395 along the southwest side of the Mono Lake just north of the community of Lee Vining.

Figure 1. Project Vicinity

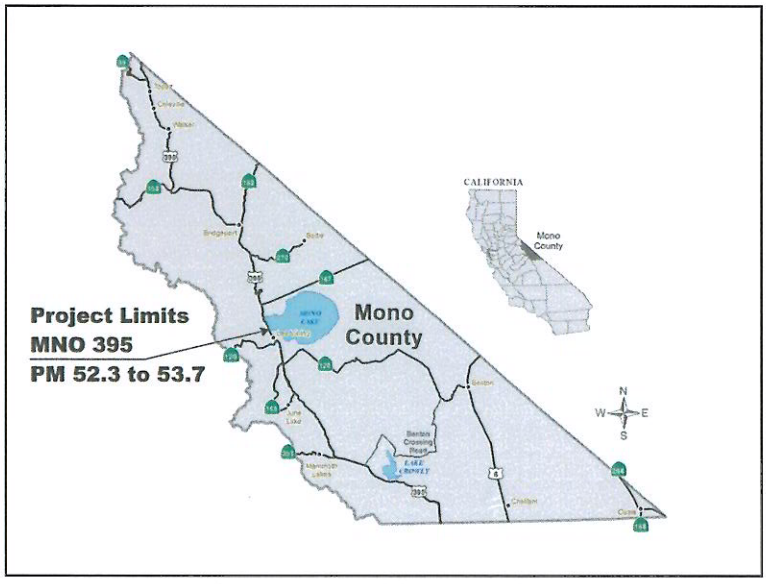
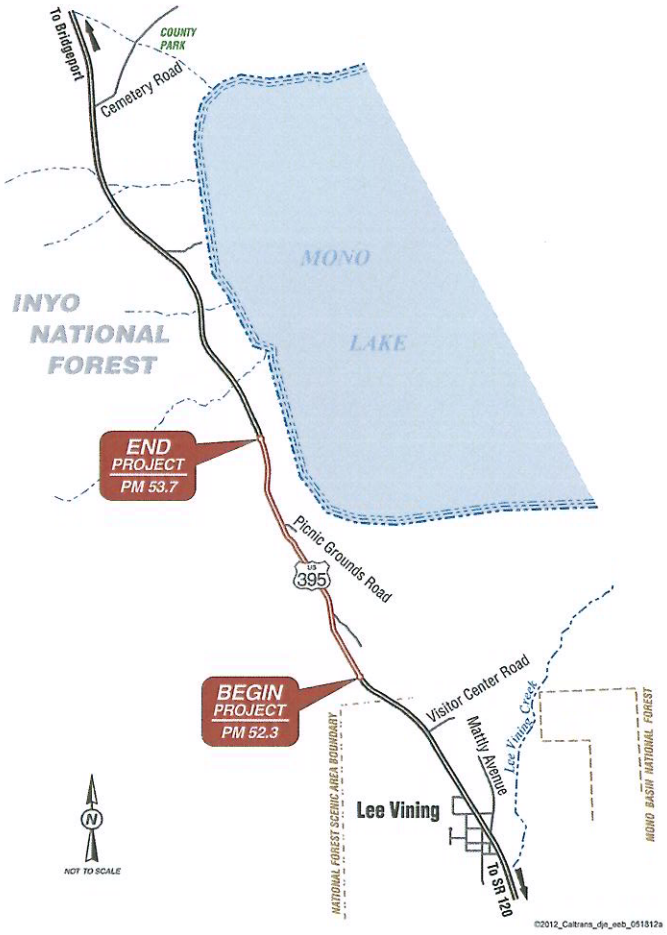


Figure 2 Project Location Map



Six slopes (Appendix A) were identified for receiving rockfall mitigation in conjunction with other facility improvements under the Mono Lake Shoulder Widening Project, proposed by Caltrans in 2000. Since that project was never constructed and no rockfall mitigation was done, on June 25, 2007 a Project Study Report (PSR) was approved that allowed this project to be programmed for support as an amendment in the 2008 State Highway Operation and Protection Program (SHOPP). The PSR provided two alternatives which encompassed laying back slopes 1, 2, and 3 and utilizing anchored mesh for slopes 4, 5, and 6 or utilizing anchored mesh on all slopes.

Alternatives being considered are:

		Slope 1	Slope 2	Slope 3	Slope 4	Slope 5	Slope 6
ALTERNATIVE 1 Build	*Design Option 1*	Cut	Cut	Revegetate	Hybrid System & Drapery	Hybrid System	Anchored Mesh
	Design Option 2	Cut	Cut	Revegetate	Anchored Mesh	Anchored Mesh	Anchored Mesh
ALTERNATIVE 2 No Build		No Build	No Build	No Build	No Build	No Build	No Build

PURPOSE AND NEED

The purpose of this project is to minimize the rockfall from the existing cut slopes, improve safety and reduce maintenance personnel's exposure.

Potential impacts to air, noise, and water quality associated with the project are described below.

Air Quality

The proposed project is located within the Great Basin Valleys Air Basin. According to 40 CFR Section 93.126 Table 2, this project falls under the category of "hazard elimination program" and is exempt from the requirement that a conformity determination be made. Such projects may proceed toward implementation even in the absence of a conforming transportation plan and Transportation Improvement Program (TIP). This project does not interfere with the implementation of the Traffic Control Measures (TCMs).

During construction, the proposed project will generate air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during demolition, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors during construction could cause occasional annoyance and complaints from residence near the right of way lane.

Caltrans Standard Specifications pertaining to dust control and dust palliative requirement is a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications, Section 14-9.01 "Air Pollution Control" and Section 14-9.02 " Dust Control" require the contractor to comply with the applicable Air Pollution Control District's rules, ordinances, and regulations.

In view of the above information, it is our opinion that no further investigation concerning air quality is required.

Noise

Transportation projects subject to Caltrans' Traffic Noise Analysis Protocol are projects defined as Type I projects in Section 23 Code of Federal Regulations §772. This section of the federal regulations describes a Type I project as: "A proposed federal or federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increase the number of through-traffic lanes." This project will neither increase the existing traffic capacity or alter the location of the highway. There are no receptors identified in the vicinity of the project limits.

Since the proposed project will not construct a highway on a new location or significantly change the alignment of the existing highway, the project is not subject to Caltrans' Traffic Noise Analysis Protocol.

Because the project would not be considered a Type 1 project, additional noise investigation in accordance with Caltrans' Traffic Noise Analysis Protocol is not required.

Water Quality

The project is located within the Mono Hydrologic Unit 601.00. Mono Lake is the major water body present in the vicinity of the project (Figures 3, 4 and 5). The State Water Resources Control Board (SWRCB) has designated Mono Lake as an Outstanding National Resource Water, a designation only conferred on one other water body in the state of California, Lake Tahoe. This designation triggers CEQA's requirement that "special emphasis" be given to the environmental resources of the Mono Lake Basin. Mono Lake is included in the EPA's 2010-303(d) list as being impaired by Salinity/TDS/Chlorides (See Table 1). The source of the pollutants has been identified as being flow regulation/modification, natural sources and unknown sources. The Lahontan Regional Water Quality Control Board has jurisdiction within the project limits.

Figure 3. Project Terrain Map

Figure 4. Project Aerial Photo

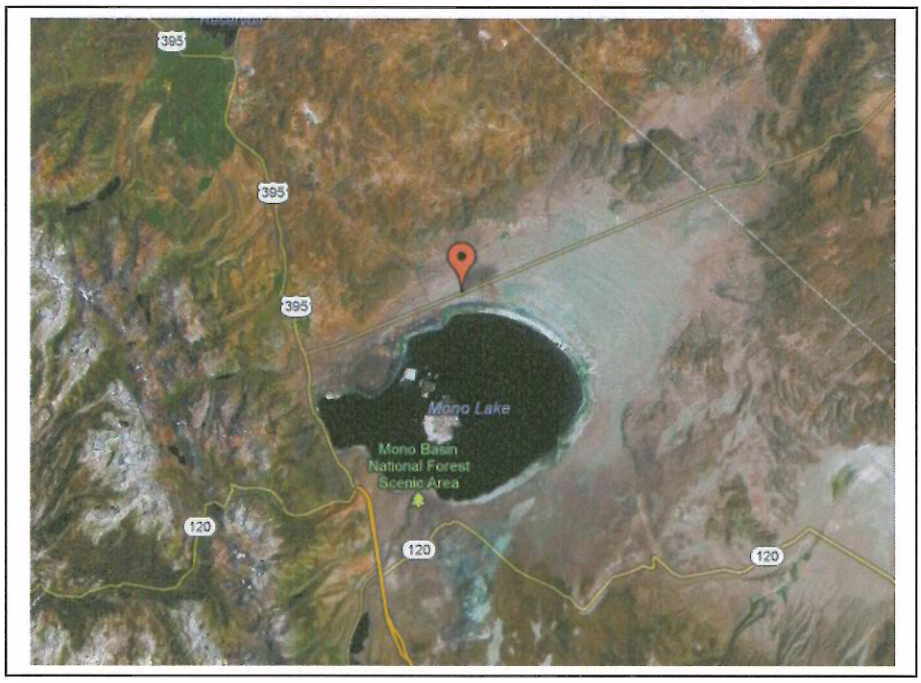
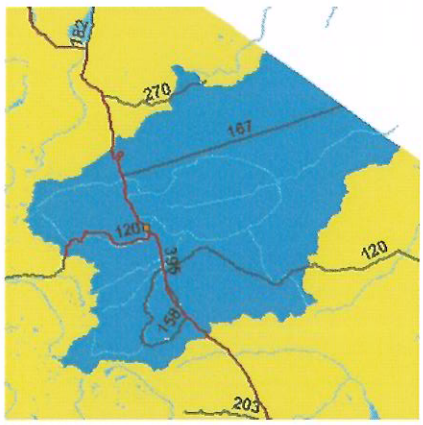


Figure 5. Hydrologic Sub-Area 601.00



Hydrologic Unit	MONO
Hydrologic Area	undefined
Hydrologic Sub-Area	undefined
Watershed Area (acres)	431616
Average Annual Rainfall (inches)	18.3

Table 1. TMDLs & 303(d) Listed Waterbodies HAS 601.00 (2010 List)

Waterbody Name	Pollutant	Size	Status
Mono Lake	Salinity/TDS/Chlorides	39743.3 Acres	Being addressed with action other than TMDL
	Beneficial Uses		
Mono Lake	AGR, AQUA, BIOL, COMM, IND, MUN, NAV, RARE, REC1, REC2, SAL, WILD		

The Water Quality Assessment of the project has determined that short-term impacts to the quality of water resources of the area might occur during construction of the project, and subsequent operation and maintenance of the project. Mono Lake is listed on the EPA's 303d list as being impaired with salinity. Potential short-term water quality impacts would be primarily associated with erosion of exposed or disturbed soils from the construction activities with sediment as being the main pollutant. The project area is located in the Mono Basin National Forest Scenic Area and in close proximity to the Mono Lake (See Figures 2 and 3).

The receiving water risk level is low as Mono Lake is not impaired for sediments and does not have beneficial uses of spawn, cold, and migratory. The receiving water (Mono Lake) risk level of low will be used to determine the calculated sediment risk for the overall risk level of the project (Appendix B- Lahontan Water Board Communication).

Erosion Control: Erosion control blankets, hydroseeding, and/or other measures will be provided to prevent erosion of newly completed slopes and encourage native seed germination prior to the photo-degradation or bio-degradation of the erosion control blanket. Standard Best Management Practices (BMPs) will be utilized during

construction to prevent erosion and storm water impacts during construction. Permanent BMPs, such as contour grading and slope rounding will be incorporated into the project to prevent long-term erosion impacts where applicable.

Materials used during construction (e.g., concrete curing compounds) may have chemicals that are potentially harmful to aquatic resources and water quality. Accidents or improper use of these materials could release contaminants to the environment. Additionally, oil and other petroleum products used to maintain and operate construction equipment could be accidentally released.

To prevent the release of these compounds, mitigation measures and BMPs will be utilized to minimize any potential impacts. Implementation of BMPs and compliance with the requirements of the Construction General Permit CGPs substantive requirements should reduce short-term impacts to water resources.

To comply with the CGP, Caltrans developed the Statewide Stormwater Management Plan (SWMP) to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing stormwater management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed Project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address stormwater runoff.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ, as amended by 2010-0014-DWG), adopted on November 16, 2010, became effective on February 14, 2011. The permit regulates stormwater discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. For all projects subject to the CGP, applicants are required to develop and implement an effective Stormwater Pollution Prevention Plan (SWPPP). In accordance with Caltrans' Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre. A WPCP is anticipated for this Project because it would disturb less than one acre of soil.

By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality

impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP.

By incorporating proper and accepted engineering practices and BMPs, the proposed project will not produce significant impacts to water quality during construction or its operation.

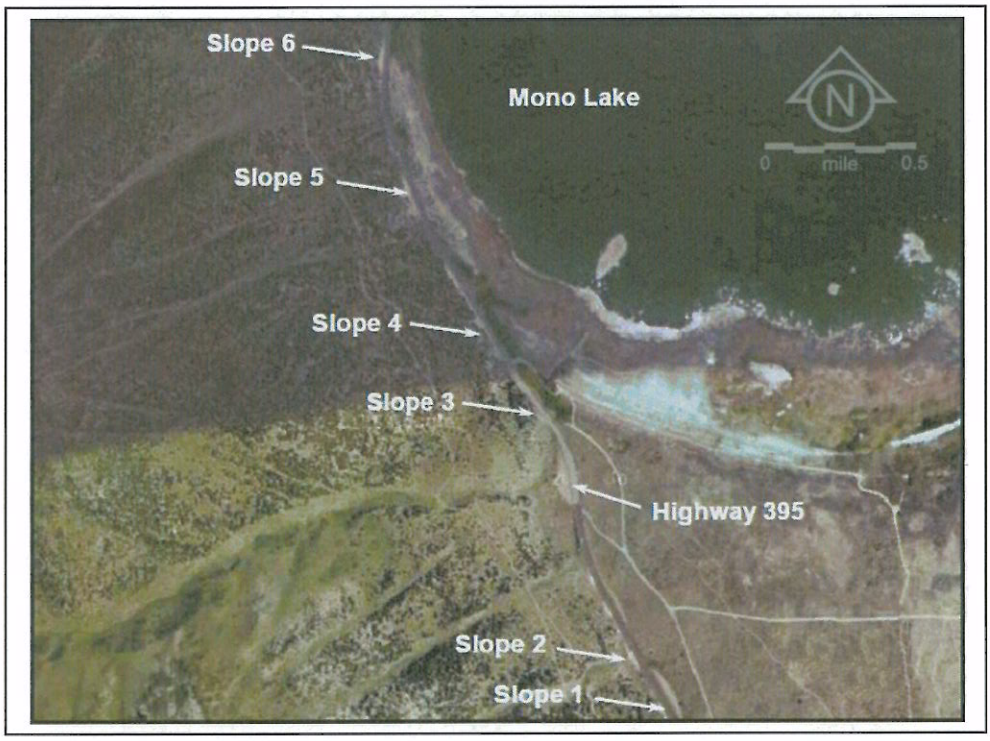
In view of the proposed project, it is our opinion that no further investigation concerning water quality is needed to proceed with the project. In the event that the scope of work changes, please request additional investigation for this project.

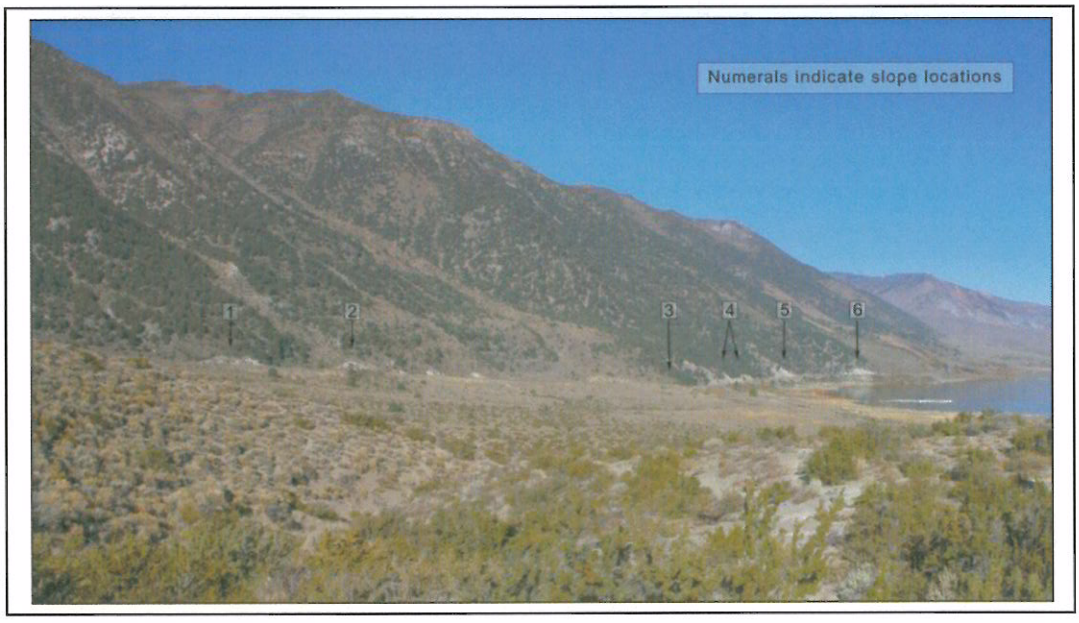
If you have any questions or the scope of work changes, please contact Rajeev L. Dwivedi at (559) 445-6218.

APPENDIX A

Photos of the Existing Slopes One to Six between PM 52.3 and 53.7

Location of the Cut Slopes





Slope #1 – Post Miles 52.34 to 52.43

Slope #2 – Post Miles 52.50 to 52.54

Slope #3 – Post Miles 52.91 to 52.97 from the Old Marina (Picnic Grounds Rd.)

Slope # 4 - 53.03 to 53.23 as seen from lake level

Slope # 5 - 53.28 to 53.44 as seen from lake level

Slope #6 - 53.51 to 53.62 as seen from lake level

Slope #6 – containment area of slope 6, looking north at southbound traffic coming around the curve.

APPENDIX B

Lahontan Water Board Communication).

Brian Wesling /D09/Caltrans/CAGov
06/06/2012 01:24 PM

To Cory Freeman/D09/Caltrans/CAGov@DOT
cc
bcc
Subject Fw: Item 1 of 2 - Caltrans D-09_Lee Vining Rockfall Project_Request for Written Review

History: This message has been forwarded.

FYI...

Brian Wesling, PE
Design Manager
Central Region PJD - Design 1 - Branch J
----- Forwarded by Brian Wesling/D09/Caltrans/CAGov on 06/06/2012 01:24 PM -----

Bud Amorfini
<BAmorfini@waterboards.ca.gov>
06/06/2012 01:23 PM

To Miguel A Perez <miguel_a_perez@dot.ca.gov>
cc Brian Wesling <brian_wesling@dot.ca.gov>
Subject Re: Item 1 of 2 - Caltrans D-09_Lee Vining Rockfall Project_Request for Written Review

Miguel,

You requested that the Lahontan Water Board review the receiving water risk level for the above-cited project. Based on the information you provided and review of the criteria in the state-wide construction general permit (CGP - Order No. 2009-009-DWQ), the receiving water risk level is low based on the fact that Mono Lake is not impaired for sediment and does not include all the beneficial uses of SPAWN, COLD, and MIGRATORY. The receiving water risk level of low should be used in combination with your calculated sediment risk level to determine your overall risk level for the project. The project should be conducted in compliance with the requirements set for the overall risk level established in the CGP - either risk level 1 or 2, depending on the sediment risk levels calculated for the project.

If you have any further questions, please contact me.

Bud Amorfini,
Engineering Geologist
Lahontan Regional Board (6)
Phone - 530/542-5463
Fax - 530/544-2271
Email - bamorfini@waterboards.ca.gov
>>> Miguel A Perez <miguel_a_perez@dot.ca.gov> 5/30/2012 6:57 PM >>>

Hello Bud-
Attached is a letter and supporting documents requesting a written review from Lahonton SRQWB of Caltran's Lee Vining Rockfall Project. I will be sending you the same documents by mail.

This is a 2 part package (due to file size) of which this is the first email.

FIVE Items are attached as follows:
Written Review Request Letter
Addendum A
Addendum B
Typical Cross Section
Area Map (Plan Cover Page)

(See attached file: Lahonton Written Review Req Let.pdf)(See attached file: Addendum A_Caltrans Lee Vining.pdf)(See attached file: Addendum B_Caltrans Lee Vining.pdf)(See attached file: X-Sections_Caltrans lee Vining.pdf)(See attached file: Area Map_Caltrans Lee Vining.pdf)